

# Failure of Partonic Transport is Not Surprising!

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# Failure of Parton Transport with Small Cross-sections is not SURPRISING!

- The whole business of Lattice QCD tells us: transition from **Hadrons to QGP is transition in scales!**
- Consider SU(2) Gluodynamics: it is just Z(2) spin system for Polyakov Loops. Then in low T-phase the **correlation length is ZERO**, but at high T-phase is **HUGE**.
- **Polyakov Loop it-self is correlation in a complex time !** Therefore, I think that Polyakov Loops are **NOT RELEVANT** dof for Transport.
- **Hadron PHENOMENOLOGY:** heavy resonances (Hagedorns) have **finite size!**
- LQCD motivated thermodynamics (Blaschke & KAB, 2003) shows that **Lattice QCD EoS** can be described by Hagedorn model, if resonance width **above Hagedorn T** exponentially grows with resonance mass!



Large Transport C-S can be understood as interaction between Resonances of finite size for High T phase!

Hagedorns +

Therefore, we should start to use Transport of finite size

Hagedorns that exist in High T phase.

pQCD cross-sections =?=

sQCD

